

Assignment Day 1

1. Write a Java program that calculates and prints the simple interest using the formula :
Simple Interest = $PTR / 100$
input values P,T,R should be accepted as command line input as below.
e.g. java Simple Interest 5 10 15
2. Write a program to compute sum of digits of a given number.
(Hint: Separate digits one by one from the number and then add)
3. Write a program that prints prime numbers between 1 to n. Number n should be accepted as command line input
4. Write a program that converts a decimal number to Roman number. Decimal Number is accepted as command line input at the time of execution.
5. WAP to to print following pattern (Pascals Triangle)

```
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
```

7. Write a Java program that accepts the radius of a circle and displays the options as follows :
 1. find diameter of a circle.(2* radius)
 2. find area of circle.(π * radius * radius)
 3. find circumference of a circle.(2 * π * radius)
 4. exit.Use case statement to implement each option and display the corresponding output.

8. WAP to display the following output

```
1
2 4
3 6 9
4 8 12 16
5 10 15 20 25
```

Above pattern follows these rules:

- Each row starts with its row number (i)
- Each subsequent number in the row is a multiple of the row number
- The number of elements in each row equals the row number